Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act	)	GN Docket No. 12-228

COMMENTS OF METROPCS COMMUNICATIONS, INC.

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TABLE OF CONTENTS

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MetroPCS Communications, Inc. ("MetroPCS"),[1] by its attorneys, hereby respectfully submits its comments in response to the *Ninth Broadband Progress Notice of Inquiry ("Ninth Notice")* issued by the Federal Communications Commission (the "Commission" or "FCC") on August 21, 2012.[2] Given that broadband is being deployed over a significant portion of the United States, and as a result, is available to a significant portion of the population, the Commission should find that broadband services are being deployed in a reasonable and timely manner. Such a determination is compelled after viewing the deployment of all types of broadband services, and in particular, mobile broadband services. Nonetheless, while there has

[1] For purposes of these Comments, the term "MetroPCS" refers collectively to MetroPCS Communications, Inc. and all of its FCC license-holding subsidiaries.

[2] *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 12-228, FCC 12-91, Ninth Broadband Progress Notice of Inquiry (rel. Aug. 21, 2012) ("*Ninth Notice*").

been considerable deployment of broadband, especially mobile broadband, the Commission should not rest on its laurels. Rather, it should take additional action to encourage additional mobile broadband deployment by increasing the amount of available useable spectrum and taking pro-competitive regulatory actions. The following is respectfully shown:

I. INTRODUCTION AND SUMMARY

In the *Ninth Notice*, the Commission seeks comment on whether broadband services are being deployed to all Americans in a reasonable and timely fashion, and what additional actions the Commission should take to accelerate broadband deployment in the time leading up to the Ninth Broadband Deployment Report ("*Ninth Report"*). MetroPCS applauds the Commission's decision to seek comment, for the first time, on whether mobile broadband deployment should be included in its overall deployment inquiry. MetroPCS has consistently advocated for such an inclusion and believes that, when both mobile and fixed broadband services are measured and assessed, the Commission will find that broadband services are being broadly deployed to Americans in a reasonable and timely fashion.

Indeed, mobile broadband deployment is growing at an exponential rate. This growth is due in part to the significant investment that mobile broadband providers and other members of the industry have invested in this technology. Just a few years ago, 3G mobile services were considered to be the new, innovative technology. Now, 4G LTE, with speeds rivaling wireline broadband, has emerged, and preparations for the next generation of mobile broadband services are already underway. In addition, the wireless industry invested billions of dollars in 2011 alone to continue deploying services and introducing new products to the market.

This investment has paid off. The rapid expansion of the mobile broadband industry has increased mobile broadband adoption rates throughout the country. More and more Americans are taking advantage of the numerous mobile service offerings on their mobile devices.

While MetroPCS agrees with the Commission that "tremendous efforts" are being made by both the private sector and the Commission to bring broadband to all Americans,[3] it also believes that more can be done. Specifically, the Commission must ensure that it does not introduce additional, unnecessary regulatory barriers to broadband deployment. Rather, the Commission should take targeted, pro-competitive actions to further promote mobile broadband deployment. Regulatory burdens should be imposed only if they pass a strict cost/benefit analysis. Furthermore, the Commission must act promptly to secure additional spectrum and distribute this spectrum equitably so that mobile broadband providers may continue on their path of expansion, ensuring that all Americans have access to broadband services.

II. THE COMMISSION SHOULD INCLUDE MOBILE BROADBAND DEPLOYMENT IN ITS DETERMINATION OF WHETHER BROADBAND IS BEING DEPLOYED IN A TIMELY AND REASONABLE MANNER

MetroPCS applauds the Commission's recognition that its analysis of broadband deployment should include evaluations of both fixed and mobile broadband deployment.[4] MetroPCS consistently has supported adding mobile broadband deployment to the Commission's analysis on whether broadband is being deployed in a reasonable and timely fashion.[5] Moreover, MetroPCS has suggested additional efforts the Commission can take to promote further mobile broadband deployment.[6] As noted by Commissioner Pai, Section 706 does not specify that

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[3] *Ninth Notice* at ¶ 2.

[4] *Id.* at ¶¶ 22- 30.

[5] *See* Comments of MetroPCS in GN Docket No. 11-121 (filed Sept. 6, 2011) ("*MetroPCS Eighth Notice Comments*").

[6] While MetroPCS agrees that the Commission should institute separate evaluations for measuring mobile and fixed broadband deployment, it does not support requiring both fixed and mobile broadband service access to be present in order to find that a household or geographic area is being served in a timely and reasonable manner. *See Ninth Notice* at ¶ 25. This reasoning goes both ways; while consumers may be "cutting the cord" and using mobile broadband, many

broadband deployment be analyzed solely through the lens of fixed broadband and, as discussed below, mobile broadband must be taken into account. With the inclusion of mobile broadband in its analysis, the Commission certainly should find that broadband is in fact being deployed in a timely and responsible manner.

In the most recent broadband report, the Commission found that "approximately 19 million Americans live in areas still unserved by terrestrial-fixed broadband"[7] – a finding that the Commission relies upon to support its ultimate determination. However, this finding ignores the fact that many of the "unserved" Americans have access to broadband connectivity through mobile wireless devices. Based on the Commission's own data, including mobile broadband deployment in its inquiry illustrates that only 5.5 million Americans do not have access to broadband, a significant decrease from the last report.[8] This figure demonstrates that, by leaving mobile broadband deployment out of its analysis, the Commission's finding that 19 million do not have access to broadband is a 245 percent overstatement of the problem.[9] As is set forth in greater detail below, since broadband providers are accelerating their investments in mobile broadband and consumers are adopting these services at an increasing rate, the time is ripe for the Commission to include mobile broadband in its overall analysis for the ninth inquiry on broadband deployment. Such an analysis would clearly demonstrate that broadband, whether fixed or mobile, is being deployed in a timely and reasonable manner to all Americans.

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still rely on wired broadband for high bandwidth activities, such as video and audio streaming and large file transfers.

[7] *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 11-121, FCC 12-90, Eighth Broadband Progress Report, ¶ 1 (rel. Aug. 21, 2012) ("*Eighth Broadband Progress Report*").

[8] *Eighth Broadband Progress Report, Dissenting Statement of Commissioner Ajit Pai*.

[9] *Id.*

A. Significant Funds Are Being Invested By Wireless Carriers To Deploy Mobile Broadband

Wireless providers have spent, and continue to spend, significant amounts of money and resources to expand and deploy broadband capability throughout the country. As Commissioner McDowell recently recognized, "mobile broadband is the fastest growing segment in the broadband market" – due in part to the investments made by American wireless providers.[10] For example, CTIA recently found that the cumulative capital investment by wireless service providers passed $335 billion as of December 2011, spending more than $25 billion from December 2010 - 2011.[11] According to another study, the wireless industry contributed 40% to a total investment of $66 billion in 2011 by wireless, wireline and cable broadband providers.[12] The significant financial investments within the wireless industry for deploying mobile broadband demonstrates the general recognition that mobile broadband is a critical part of the overall broadband deployment picture.[13] This growth demonstrates that the Commission

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[10] *Eighth Broadband Progress Report, Dissenting Statement of Commissioner Robert M. McDowell; see also* Julius Genachowski, Chairman, Fed. Commc'n Comm'n, Remarks as Prepared for Delivery at the U.S. Dep't of Transp. and AT&T Texting and Driving Event (Sept. 19, 2012) *available at* http://www.fcc.gov/document/chairman-genachowski-texting-driving-event (*Chairman Genachowski Texting and Driving Speech*") (stating that "all indications are that [the mobile] sector will only continue to grow").

[11] CTIA – The Wireless Association, 2011 Semi-Annual Wireless Industry Survey, 10 (Apr. 13, 2012) *available at* http://files.ctia.org/pdf/CTIA_Survey_Year_End_2011_Graphics.pdf ("*CTIA 2011 Semi-Annual Wireless Survey*").

[12] Patrick Brogan, US Telecom – The Broadband Association, Updated Capital Spending Data Show Continued Significant Broadband Investment in Nation's Information Infrastructure, Research Brief, 1, 3 (Apr. 20, 2012) *available at* http://www.ustelecom.org/sites/default/files/documents/042012_Investment_2011_Research_Brief.pdf.

[13] In addition, in July 2012, Samsung invested $5 million in Stoke, Inc., a Mobile Broadband firm to support its accelerated LTE deployment. *Samsung Make Strategic Investment in Mobile Broadband Developer Stoke To Support Accelerated LTE Push*, PRNEWSWIRE (Jul. 18, 2012) http://www.prnewswire.com/news-releases/samsung-makes-strategic-investment-in-mobile-broadband-developer-stoke-to-support-accelerated-lte-push-162841606.html.

certainly can no longer ignore mobile broadband in its analysis. MetroPCS is no exception, as it has invested hundreds of millions of dollars in new technologies. As a result of its investment, MetroPCS became the first mobile wireless provider to launch 4G LTE services in the United States, and at the same time, also released the world's first commercially available dual mode 4G LTE-enabled CDMA handset, the Samsung Craft.[14] Since then, MetroPCS' investments have allowed it to reach another innovative milestone in launching the world's first commercially available Voice over LTE Service ("VoLTE") and VoLTE-Capable 4G LTE Smartphone.[15] MetroPCS also was the first mobile service provider to reach 90 percent 4G LTE coverage over its existing CDMA coverage area. Further, notwithstanding the relatively smaller spectrum holdings of MetroPCS available for broadband, in many areas MetroPCS is able to offer significant broadband speeds that allow customers to stream video and surf the Web. Such innovations help demonstrate the fact that mobile broadband is playing an increasingly important role in broadband deployment and is a major driver of overall broadband deployment and adoption.

B. Mobile Service Offerings Are Dramatically Increasing The Adoption of Broadband Services

As a result of the investments described above, mobile broadband connectivity in America is continuing on its path of rapid expansion due to new technologies constantly entering and expanding the market. With this expansion also comes increased mobile broadband

[14] Press Release, MetroPCS Launches 4G LTE Services in the Boston, New York City and Sacramento Metropolitan Areas (Dec. 15, 2010) http://www.metropcs.com/metro/presscenter/pressArticles.jsp?artTitle=http%3A//www.metropcs.com/assets/presscenter/assets/htm/mpcs-news-20101215.htm.

[15] Press Release, MetroPCS Launches World's First Commercially Available Voice Over LTE Service and VoLTE-Capable 4G LTE Smartphone (Aug. 7, 2012) http://www.metropcs.com/metro/presscenter/pressArticles.jsp?artTitle=http%3A//www.metropcs.com/assets/presscenter/assets/htm/MetroPCS+VoLTE+Handset+-+FINAL.html.

adoption. In a one year period, the amount of wireless subscriber connections increased 7% to 331.6 million Americans.[16] As of April 2012, one study found that over 88 percent of adults owned a mobile phone,[17] while another study pointed out that 44 percent of U.S. mobile subscribers owned a smartphone device in 2011, compared to just 18 percent in 2009.[18] Even the Commission's own data demonstrates that the number of Americans without access to mobile services has decreased significantly from 2010 – 2011.[19] Specifically, the number of Americans without access to mobile services with speeds of at least 768 kbps/200 kbps has decreased from 15.4 million (five percent) to 5.1 million (1.6 percent).[20] In a rising and seemingly unending trend, Americans are adopting mobile broadband services as quickly as such services are being provided. In fact, as recently noted by Chairman Genachowski, "[i]n the U.S., there are more connected mobile phones than there are people" and the majority of those phones are now smartphones.[21] MetroPCS believes that as 4G LTE is deployed by all of the major carriers, this trend will accelerate further as users experience the faster speeds and greater capacity available through 4G LTE.

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[16] *CTIA 2011 Semi-Annual Wireless Survey* as reported by Dr. Robert Roche, *CTIA Wireless Industry Indices Report: Now Available*, CTIA BLOG (May 17, 2012), http://blog.ctia.org/2012/05/17/indices-report/.

[17] Aaron Smith, *17% of Cell Phone Owners do Most of Their Online Browsing on Their Phone, Rather Than a Computer or Other Device*, PEW Research Center, 2 (June 26, 2012) *available at* http://pewinternet.org/~/media/Files/Reports/2012/PIP_Cell_Phone_Internet_Access.pdf.

[18] NIELSEN, THE MOBILE MEDIA REPORT, 3 (Dec. 15, 2011) *available at* http://www.brandchannel.com/images/papers/534_nielsen_wp_mobile_media_report_1212.pdf ("NIELSEN MOBILE MEDIA REPORT").

[19] *Eighth Broadband Deployment Report* at ¶¶ 86-87.

[20] *Id.*

[21] *Chairman Genachowski Texting and Driving Speech.*

Chairman Genachowski also recently noted that "[m]ost of us can't imagine life without our mobile phone."[22] Indeed, many Americans are finding that mobile service offerings allow them to replace what used to be thought of as everyday items – calendars,[23] cameras,[24] radios and other music players[25] and most recently – credit cards[26] – with a single device. One of the more recent mobile adoptions is commerce, and mobile service providers along with credit card companies and banks are offering consumers the option of using their smartphone as a "mobile wallet."[27] A Nielsen study found that "[m]obile is transforming into a powerful commerce tool,

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[22] *Id.*

[23] *See* Pamela Paul, *A Paper Calendar? It's 2011*, N.Y. TIMES, July 29, 2011, *available at* http://www.nytimes.com/2011/07/31/fashion/calendar-wars-pit-electronics-against-paper.html?pagewanted=all&_r=0 (discussing the trend of consumers converting from paper calendars to electronic calendars); Apple iPhone Built-in Apps, http://www.apple.com/iphone/built-in-apps/(last visited Sept. 20, 2012) (discussing the ability of the iPhone to integrate several calendars into one application).

[24] *See* Sam Grobart, *In Smartphone Era, Point-and-Shoots Stay at Home*, N.Y. TIMES, Dec. 3, 2010, *available at* http://www.nytimes.com/2010/12/04/technology/04camera.html?_r=0; Apple iPhone Built-in Apps, http://www.apple.com/iphone/built-in-apps, (last visited Sept. 20, 2012) (describing the improved 8 megapixel camera on the iPhone 5).

[25] Claire Caine Miller, *Listening to Radio on the Web? That's So Last Year*, N.Y. TIMES BLOG, Sept. 10, 2009, *available at* http://bits.blogs.nytimes.com/2009/09/10/listening-to-radio-on-the-web-thats-so-last-year/ (discussing the abundance of radio applications available for mobile phones); Apple iPhone Built-in Apps, http://www.apple.com/iphone/built-in-apps, (last visited Sept. 20, 2012) (discussing the ability of the iPhone to hold "millions of songs").

[26] *See infra* notes 27, 28.

[27] *See e.g.* Sprint Mobile Wallet, http://developer.sprint.com/site/global/develop/product_services/sprint_mobile_wallet/sprint_mobile_wallet.jsp (last visited Sept. 20, 2012) (describing the service as a product that aggregates payment methods and makes them available as one-click payment options on a user's mobile phone); Google Wallet, http://www.google.com/wallet/#utm_source=HA&utm_medium=ha_sem_sk&utm_campaign=en-US&utm_term=%2Bmobile%20%2Bwallet (last visited Sept. 20, 2012) (allowing customers to "pay in-store by tapping the back of [their] phone to an NFC point of sale terminal at checkout").

facilitating consumer transactions and access to real-time information and deals."[28] In fact, 29 percent of smartphone owners use their phone for shopping-related activities.[29] Further, several of the most visited sites and applications on mobile phones are Facebook, YouTube, and e-mail.[30] While a year or two ago these services were largely used on computers via wireline broadband facilities, the additional functionality of having these services available on the go allows consumers to be constantly connected – whether it is to search for a lunch deal on groupon,[31] or to upload a photo to facebook while walking down the street,[32] – mobile services provide consumers the constant connectivity to do so.

Many Americans find themselves having to rely on mobile broadband service as their sole access to broadband services. For example, for many low-income Americans, mobile services may be used for Internet access in lieu of fixed or wired broadband. In this role, mobile broadband is continuing to bridge the digital divide by allowing those Americans who may not otherwise be able to afford broadband access to get connected. A recent study conducted by the National Center for Health Statistics found that adults living in poverty (51 percent) were more likely than adults living near poverty (39.6 percent) and high income adults (28.9 percent) to be living in households with wireless-only telephones.[33] These statistics give rise to an important

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[28] NIELSEN, STATE OF THE MEDIA: U.S. DIGITAL CONSUMER REPORT, Q3-Q4 2011, 12 (Feb. 23, 2012) *available at* http://www.nielsen.com/us/en/insights/reports-downloads/2012/us-digital-consumer-report.html ("NIELSEN 2011 STATE OF THE MEDIA REPORT").

[29] *Id.* at 12.

[30] *Id.* at 7, 8.

[31] The Groupon App is the tenth most popular app on the iOS platform and ranks 22nd on Android devices. *Id.* at 12.

[32] 58.8 percent of 18-34 year olds use their mobile phone to access social networking sites. *Id.* at 9.

[33] Stephen J. Blumberg, Ph.D, & Julian V. Luke, *Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, January – June 2011*, 3 (National Center

question – how many of the low-income Americans that the Commission found were without fixed broadband access are otherwise gaining access through mobile services?[34] Mobile wireless services generally are more cost-effective for lower income households because carriers such as MetroPCS offer a variety of prepaid service plans that are more affordable, predictable and flexible than fixed broadband service plans. Under MetroPCS' service plans, customers pay for service in advance, without a credit check, with rate plans providing unlimited voice, text and data on a nationwide basis beginning as low as $40 per month, which includes taxes and regulatory fees. By introducing affordable solutions for low income households, MetroPCS has helped bridge the Internet divide and has found that a significant percentage of its customers are first-time wireless users. This percentage is further increased as providers such as MetroPCS have made available 4G LTE to these users, the speed of which allows them to have an experience that can, in many cases, match DSL or equivalent services. By excluding mobile broadband users from its analysis, the Commission is ignoring a key component of broadband deployment – a factor that must change for the future.

C. The Commission Should Consider Consumer Demand and Needs in its Evaluation of Mobile Broadband Deployment and Availability

The Commission's prior decision to set a high definitional threshold for what would be deemed broadband speed both served to predetermine the outcome of its report and to ignore the beneficial effect of mobile broadband services.[35] From here forward, when developing

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for Health Statistics) (June 2012) *available at* http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201206.pdf

[34] The *Eighth Broadband Deployment Report* found that "Americans without access to fixed broadband meeting the speed benchmark tend to have lower median household income." *Eighth Broadband Deployment Progress Report* at ¶ 75.

[35] *See Eighth Broadband Progress Report, Dissenting Statement of Commissioner Robert M. McDowell.*

benchmarks for mobile broadband, the Commission should remove its near-singular focus on broadband speed and look to consumer demand for an accurate picture of broadband deployment. As a result, the Commission's inquiry will no longer be based on the "need for speed," but rather on the "demand of the band." The Commission must consider the "types and services and applications that consumers use on their mobile devices" to gain an accurate understanding of the state of broadband deployment in the United States.[36] For example, during the evaluation, the Commission is likely to find that an "apps revolution"[37] currently is underway and that a majority of time customers spend using their mobile phones is spent accessing applications. This access is not restricted to a certain speed.[38] And therefore, these services, likely will not be found to constitute "broadband deployment" under the Commission's current 4 Mbps/1 Mbps threshold. This makes no sense given today's reality. Under an evaluation framework that has historically depended so heavily on speed, the Commission's proper acknowledgment that "[m]obile services generally have lower speeds than certain fixed technologies"[39] requires a monumental change in this next broadband deployment review. And, an analytic approach that better correlates to consumer demand will allow the Commission to develop more accurate benchmarks for the Ninth Broadband Deployment Inquiry and future inquiries as well.

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[36] *Ninth Notice*, at ¶ 24.

[37] *Chairman Genachowski Texting and Driving Speech.*

[38] Nielsen recently found that in 2011, 64 percent of time spent using a mobile phone is spent using applications. NIELSEN 2011 STATE OF THE MEDIA REPORT, 2.

[39] *Ninth Notice* at ¶ 22. Indeed, while mobile services have in the past had speeds considerably slower than wireless broadband, this may well change in the future as 4G LTE services have offered speeds in excess of 20 Mbps in both directions. *See* Sascha Segan, *Fastest Mobile Networks 2012*, PCMAG, June 18, 2012, *available at* http://www.pcmag.com/article2/0,2817,2405597,00.asp.

The Commission needs to base its determination for what constitutes timely and reasonable broadband deployment on what consumers actually want, rather than on a somewhat arbitrary determination of the speeds the Commission thinks they need. Not every customer needs or wants 4 Mbps down to cover their broadband needs, and the Commission must learn from the trends of consumer demand in making its determination. Using a relatively high threshold categorically disregards the increased functionality and utility of mobile broadband. Furthermore, in many if not most instances streaming applications do not require anywhere near 4 Mbps to be delivered without interruption. In fact video, even in high-definition, will stream below 4 Mbps, especially when compression is taken into account. Moreover, given the smaller screen size of mobile broadband devices, even high-definition can be compressed to display on the smaller screen making less speed necessary.

If the Commission wants an accurate picture of the current state of broadband deployment, it must recognize that the key for mobile broadband services is their ability to provide mobility. Indeed, customers have indicated that they are willing to accept slower speeds for increased mobility.[40] For instance, for a customer who focuses on obtaining information services from different locations throughout his day (i.e., on his morning subway commute, sitting in his office, walking around for lunch, etc.) rather than on a speed-dependent service like high-definition video capability on his smartphone, speed may not be a deciding factor in his purchase. This customer, therefore, may not choose a rate plan with the highest speed – but instead, will choose a rate plan that promises ubiquitous connection. Consumers not only want

[40] CTIA has noted that "[c]onsumers often want mobility, and are in many cases willing to trade some speed for the freedom of a ubiquitous connection – while still able to stream video or audio, quickly download large files, browse the Internet, and use advanced gaming and social networking applications, among other features." Comments of CTIA – The Wireless Association in GN Docket No. 10-159, at 11 (filed Sept. 7, 2010).

this freedom of choice, but they expect these choices, driving broadband service providers to focus on offering uniquely-tailored service plans, not necessarily high-speed connections. MetroPCS, a carrier focused intently on consumer needs, knows this consumer preference firsthand. MetroPCS' business model has been molded around the ability to provide consumers with these choices. For example, MetroPCS offers different unlimited data plans at different speeds to allow the customer to choose which combination best suits their lifestyle and needs. The Commission should not continue to use government-mandated command and control regulations to mandate only fast speeds, but rather should focus on those forces that will drive consumer choice to ensure that such broadband deployment continues.

D. Increased Usage of Wi-Fi Services Further Demonstrates the Importance of Mobility and Therefore Should Be Included in Mobile Deployment Measurements

Wi-Fi also should be considered in assessing mobile broadband deployment. Coffee shops have long offered Wi-Fi services to their customers,[41] but now venues such as parks,[42] airports,[43] trains[44] airplanes[45] and even amusement parks such as Disney World[46] all offer Wi-Fi

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[41] Starbucks, one of the first chains to offer Wi-Fi access to its customers, originally had agreements with T-Mobile and AT&T that either required payment, or in the case of an AT&T customer or Starbucks card holder, for free, up to two hours of Wi-Fi. Since 2010, Starbucks has eliminated that model and now offers free Wi-Fi to all patrons, with no time limitation. Christina Warren, *Starbucks to Offer Free Wi-Fi at All Stores Nationwide*, Mashable.com, http://mashable.com/2010/06/14/starbucks-free-wifi/ (June 14, 2010) (last visited Sept. 20, 2012).

[42] *See e.g.*, Wi-Fi Wireless Internet Service in NYC Parks, http://www.nycgovparks.org/highlights/places-to-go/wi-fi (last visited Sept. 20, 2012); California Department of Parks and Recreation, Wireless Internet Service, http://www.parks.ca.gov/?page_id=23780 (last visited Sept. 20, 2012)

[43] *See* Wi-Fi FreeSpot Directory, http://www.wififreespot.com/airport.html (last visited Sept. 20, 2012) (providing a list of Airport locations throughout the world that offer free Wi-Fi).

[44] *See* Amtrak – Wi-Fi? Why, Yes, http://www.amtrak.com/servlet/ContentServer?SnippetName=IBLegacy&pagename=am/AM_Snippet_C/SnippetWrapper&ibsref=wifiAvailable (last visited Sept. 20, 2012).

services to their customers and guests. The reality is that Americans rarely need to go without wireless service if they have a mobile broadband device capable of connecting to a Wi-Fi network. This trend will not slow down or stop – rather, it will grow.[47] For example, the Commission's adoption of rules for White Spaces devices should cause Wi-Fi to play an even greater role in providing broadband connectivity.

In sum, the proliferation of Wi-Fi services provides an additional basis for the Commission to give mobile broadband services the credit that they deserve when the Commission determines whether broadband is being deployed to all Americans in a reasonable and timely fashion for its *Ninth Report*.

E. A Consumer's Choice to Forgo Broadband Does Not Mean That Broadband Is Not Being Deployed In a Timely and Reasonable Fashion

The Commission's broadband analysis must account for the fact that not all Americans desire access to broadband services – fixed or mobile. These individuals may believe that the Internet is not relevant or useful in their lives, or they may not make broadband connectivity a priority when there are other necessities that they must focus on obtaining. The important issue is not necessarily who has bought it, but rather who has access to it and whether it is affordable.

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[45] Several airlines offer in-flight Wi-Fi access, and boast connections to Wi-Fi enabled laptops, PDAs or smartphones so that customers may "stay connected." *See e.g.*, American Airlines, Airplane Wifii Access, http://www.aa.com/i18n/urls/entertainmentOnDemand.jsp#wi-fi (last visited Sept. 20, 2012); Delta In-Flight Wi-Fi Access, http://www.delta.com/traveling_checkin/inflight_services/products/wi-fi.jsp (last visited Sept. 20, 2012); WiFi Access – Southwest Airlines, http://www.southwest.com/wifi/ (last visited Sept. 20, 2012); Virgin America – Take Off and Log On, http://www.virginamerica.com/vx/booking/wifi (last visited Sept. 20, 2012).

[46] *Disney Rolls out Free Wi-Fi at Magic Kingdom*, FOXNEWS.COM, http://www.foxnews.com/travel/2012/08/02/disney-rolls-out-free-wifi/ (Aug. 2, 2012).

[47] The number of smartphone subscribers using the mobile Internet has grown 45 percent since 2012. NIELSEN MOBILE MEDIA REPORT, 2.

To these points, the actual number of individuals who have access to broadband services are much higher than merely who has bought the service.

The Commission also must take account of another natural, and likely incurable, barrier: the lack of digital literacy in the United States. MetroPCS applauds efforts to ease this problem such as the nationwide digital literacy partnership between American Job Centers and the Connect2Compete (C2C) coalition.[48] These programs are especially important as 50 percent of today's jobs require technology skills, and that figure is expected to grow to 77 percent in the next decade.[49] In addition, more than 80 percent of Fortune 500 companies, including Wal-Mart and Target, require online job applications according to another study by TaleoResearch.[50] While these figures demonstrate the importance of the continued effort to offer digital literacy training and information to the 66 million Americans lacking in these skills,[51] MetroPCS also stresses that the Commission must recognize that, due to the ever-changing nature of this technology, completely eliminating digital illiteracy in the United States is a near impossible task.

III. THE COMMISSION SHOULD ADDRESS ANTI-COMPETITIVE REGULATORY IMPEDIMENTS TO BROADBAND DEPLOYMENT AND AVOID UNNECESSARY REGULATORY BARRIERS

The Commission's evaluation of broadband deployment should not only consider those factors that drive broadband deployment and adoption, but also should recognize and avoid

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[48] *See* Jordan Usdan & Kevin Almasy, *FCC Chairman Announces Jobs-Focused Digital Literacy Partnership Between Connect2Compete and the 2,800 American Job Centers*, OFFICIAL FCC BLOG (Jul. 23, 2012) http://www.fcc.gov/blog/fcc-chairman-announces-jobs-focused-digital-literacy-partnership-between-connect2compete-and-28.

[49] Fact Sheet, American Job Centers Announcement Event, http://www.fcc.gov/document/fact-sheet-american-job-centers-announcement-event.

[50] *Id.*

[51] *See* Usdan & Almasy, *supra* note 48.

impeding broadband deployment with potential future regulatory barriers to such deployment. The Commission periodically seeks comment on which actions it can and should take to further accelerate broadband deployment and availability.[52] Certainly, as noted above, there are aspects of broadband deployment that the Commission cannot control. However, there also are actions that the Commission can take – or avoid taking – to ensure that those Americans who do wish to have broadband access are not needlessly hindered from doing so.

A. Current Regulatory Impediments to Broadband Deployment

While MetroPCS appreciates the Commission's efforts to encourage data roaming agreements, MetroPCS still finds it extremely difficult to obtain roaming agreements on commercially reasonable terms.[53] Roaming agreements are vital to ensure that small, rural and mid-tier carriers like MetroPCS are able to effectively provide nationwide wireless service to their customers. If small, rural and mid-tier carriers are unable to procure roaming agreements on reasonable terms with reasonable rates, the consumer will ultimately be harmed. In some instances, if service outside of a carrier's network is not available for the demographics with low adoption rate – low-income consumers[54] – then those customers may not find it cost-effective to sign up for these services. This is particularly true with many customers finding nationwide

[52] *Ninth Notice* at ¶ 5.

[53] *See e.g.*, MetroPCS Comments in WT Docket No. 12-4, 20 (filed July 10, 2012) (discussing the need for roaming conditions); MetroPCS Comments in WT Docket No. 12-69, 10 -12 (filed June 1, 2012) (arguing that the lack of interoperability increases the difficulty of obtaining reasonable roaming arrangements for competitive carriers); MetroPCS Comments in WT Docket No. 11-186, 22-25 (filed Dec. 5, 2011) (noting that despite Commission efforts, the lack of data roaming at reasonable rates continue to be a major disadvantage for small, rural and mid-tier wireless carriers).

[54] NTIA reported that "broadband adoption at home by rural, low-income, and minorities lagged significantly behind other groups of Americans." *Eighth Broadband Progress Report* at ¶122 .

coverage to be table stakes when looking to choose a wireless provider. Thus, a lack of roaming agreements will only continue to increase the digital divide.

In addition, the lack of 700 MHz Interoperability also impedes broadband deployment. As MetroPCS repeatedly has stressed, "the lack of interoperable equipment across the Lower 700 MHz Band has significantly hampered the ability of small, rural and mid-tier carriers to deploy next-generation 4G LTE services to their customers."[55] The lack of interoperability means that it is more difficult for small, rural and mid-tier carriers to obtain the latest cutting edge handsets because they will likely be manufactured only for the "Big 4" nationwide carriers, and with recent acquisitions, perhaps only the Twin Bells – AT&T and Verizon. If carriers are unable to obtain attractive, reasonably-priced wireless devices for their customers that operate over 700 MHz A Block spectrum, then they are not assured a return on any investment in deployment, and they will not invest the resources that are necessary to deploy the 700 MHz A Block. As MetroPCS has reminded the Commission before, "[t]his outcome flies in the face of the Commission's and President Obama's goal of accelerating the reach of broadband to all Americans."[56] The Commission should take immediate action in its pending 700 MHz interoperability proceeding to resolve such issues. In addition, the Commission must take action to resolve the Channel 51 interference problems that currently plague the 700 MHz A Block. Without Commission action, numerous markets will continue to be unconstructed – leaving prime spectrum fallow at a time of a severe spectrum crunch. MetroPCS urges the Commission to take immediate actions to resolve those interference concerns.

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[55] MetroPCS Comments in WT Docket No. 12-69, 7 (filed June 1, 2012).

[56] MetroPCS Comments in WT Docket No. 12-69, 9 -10 (June 1, 2012) (*citing* The National Broadband Plan, *generally National Broadband Plan*; President Barack Obama, "Unleashing the Wireless Broadband Revolution," Presidential Memorandum (Jun. 28, 2010), *available at* http://www.whitehouse.gov/the-press-office/presidential-memorandum-unleashing-wireless-broadband-revolution).

B. The Commission Should Avoid Imposing Unnecessary Regulatory Barriers

In addition to ensuring that certain issues are resolved, the Commission must also avoid imposing unnecessary regulatory burdens on industry participants. There are several open proceedings that could result in significant burdens being imposed on wireless carriers, and MetroPCS urges the Commission to consider the impact that some of these proposed regulations would have on mobile broadband deployment.[57] Such regulations take critical resources away from broadband deployment, particularly for small, rural and mid-tier wireless carriers. This is not a novel request, but it is one that MetroPCS has previously placed in the record.[58] Burdensome mandates and the finances and other resources that they consume may likely impact a wireless carrier's ability to continue to deploy broadband services.[59] This is especially true for small, mid-tier and rural carriers who lack the abundant funds and resources of the "Twin Bells" (AT&T and Verizon). Accordingly, MetroPCS urges the Commission to recognize the adverse effect that unnecessary "one-size-fits-all" regulations, such as the network neutrality requirements, may have on future broadband deployment and that such a regulatory approach is

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[57] *See e.g.*, Comments of MetroPCS in PS Docket No. 11-60 (filed Sept. 4, 2012) (As a response to the recent Derecho storm, the Commission has proposed to impose "one-size-fits-all burdensome mandates which are not well-suited to address potential outages, and will likely inhibit competition); MetroPCS Ex Parte Notice in PS Docket Nos. 11-153, 10-255 (filed Sept. 13, 2012); Comments of MetroPCS in PS Docket Nos. 11-153, 10-255 (filed Dec. 12, 2011) (In the transition to NG911, the Commission has proposed stringent testing and procedures on wireless carriers. MetroPCS has repeatedly argued that such regulations will require significant resources and restructuring from wireless carriers, and small, rural, and mid-sized service providers should be excluded from mandatory regulations or at the very least, be provided additional time to implement any new regulations).

[58] MetroPCS Comments in WT Docket No. 11-186, 32 (filed Dec. 5, 2011).

[59] Imposing additional – yet unnecessary – regulations will likely take away from funds that could otherwise be used for broadband deployment. *See* Peter Whoriskey, *Regulations a rising economic burden to manufacturers, report says*, THE WASHINGTON POST (online) (Aug. 21, 2012) http://www.washingtonpost.com/business/economy/regulations-an-economic-burden-to-manufacturers-report-says/2012/08/20/3aa4501a-eb01-11e1-9ddc-340d5efb1e9c_story.html?wpisrc=nl_headlines_nonlocal.

both unnecessary and counterproductive, since all wireless carriers are not, in fact, created equal. Accordingly, if the Commission finds that it must impose additional regulations on wireless carriers, MetroPCS urges the Commission to consider distributing the burdens of these regulations in a manner that ensures small, mid-tier and rural carriers can remain on the playing field and continue to offer competitive services to consumers.[60]

In fact, Chairman Genachowski has previously endorsed policy objectives noting that agencies should refrain from imposing regulatory mandates that do not pass a stringent cost/benefit analysis.[61] Moreover, a recent report conducted by the Phoenix Center supports MetroPCS' assertions regarding the correlation between burdensome regulations and decreased broadband deployment. The report concluded that regulations may impede FCC efforts to get more spectrum online for broadband services.[62] As noted below, the spectrum crunch must be addressed in the near-term, with spectrum distributed fairly to promote continued broadband deployment. This next step will not be feasible if the Commission decides to place conditions on spectrum licenses that act as taxes because this "'taxation by condition' will discourage the large

[60] In order to increase competition in the industry, the Commission may also want to consider whether the time has come to adopt a dominant/non-dominant carrier regulatory regime for the wireless industry. Given the current industry structure, along with the disparity in resources and spectrum available to the largest carriers as compared to the smaller carriers, having more stringent regulatory requirements for the largest wireless carriers – the Twin Bells – may promote competition and level the playing field between the largest and smallest carriers.

[61] President Barack Obama issued an Executive Order on July 11, 2011 which called on federal agencies, *inter alia*, to use the "least burdensome tools for achieving regulatory ends," by conducting both quantitative and qualitative cost-benefit analyses. Exec. Order No. 13579, 76 FR 41587 (Jul. 14, 2011), *available at* http://www.gpo.gov/fdsys/pkg/FR-2011-07-14/pdf/2011-17953.pdf; News Release, FCC, Statement from FCC Chairman Julius Genachowski on the Executive Order on Regulatory Reform and Independent Agencies (Jul. 11, 2011), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-308340A1.pdf.

[62] T. Randolph Beard et al., *Taxation by Condition: Spectrum Repurposing at the FCC and the Prolonging of Spectrum Exhaust* 4 (Phoenix Center Policy Paper No. 44, 2012) *available at* http://xrl.us/bnpgm5.

scale transactions necessary to resolve the spectrum exhaust."[63] Therefore, in order for the wireless carriers to work with the Commission in an effort to ensure that broadband is deployed to all Americans in a reasonable and timely manner, the Commission must provide these carriers with the appropriate tools to do so – and not attach burdensome requirements that prohibit the distribution of spectrum and hinder additional broadband deployment.

IV. THE COMMISSION MUST MAKE SPECTRUM AVAILABLE TO ALL WIRELESS CARRIERS TO ENSURE CONTINUED BROADBAND DEPLOYMENT

In order for increased mobile broadband deployment to continue to occur, wireless providers must have access to useable spectrum.[64] It is a plain fact that all wireless carriers will need more spectrum to keep up with growing data demands. Without it, the Commission cannot expect wireless carriers to continue to deploy broadband services, let alone increase their deployment rates. The issue however is how that spectrum is distributed. If only the largest carriers get the spectrum, the Commission and the industry will be conceding that further consolidation will occur. That is why the Commission and wireless carriers must work together to ensure that spectrum is secured and fairly distributed to all carriers who need it.

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[63] *Id.*

[64] Indeed, "[s]pectrum fuels the wireless industry" and also can provide additional benefits to this country's economy. A recent study found that making 500 MHz of spectrum available in the next 10 years will "supercharge" the economy, including a $96.2 billion increase in wireless service provider revenues and a $22 billion increase in wireless device revenues. Such an increase in wireless revenue will allow for the continued deployment of mobile broadband services. Roger Entner, The Wireless Industry: The Essential Engine of US Economic Growth (May 2012) *available at* http://reconanalytics.com/wp-content/uploads/2012/04/Wireless-The-Ubiquitous-Engine-by-Recon-Analytics-1.pdf.

Accordingly, the Commission must conduct a meaningful inventory in order to find and allocate spectrum that is not being put to its highest and best use. This need has never been more necessary than it is now. With the continued consolidation of the wireless industry,[65] future spectrum opportunities are even more important for competitive carriers. Spectrum-starved wireless carriers are facing the reality that 4G LTE, which was once the future, is now the present. Carriers are also faced with exponential growth in demand for mobile broadband data. If American wireless carriers are expected to continue on this trend and further innovate and introduce more advanced technologies, then they must be granted access to spectrum.

There are several open proceedings and other opportunities that will allow the Commission to provide this necessary spectrum. The Commission should first evaluate its inventory and clean up the back-log of available spectrum opportunities that it has not yet acted upon. While MetroPCS applauds the Commission for beginning to start the process for incentive auctions on broadcast spectrum,[66] it must also take action on other spectrum that it has available to it. Accordingly, the Commission should promptly institute auctions pursuant to The Middle Class Tax Relief and Job Creation Act of 2012 (the "JOBS Act") regarding numerous bands of spectrum. This legislation provides the Commission with the opportunity to make more spectrum available for commercial use and specifies that within three years, the FCC must

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[65] *See e.g. In the Matter of Applications of Cellco Partnership d/b/a Verizon Wireless and SpectrumCo and Cox TMI, LLC For Consent To Assign AWS-1 Licenses, Applications of Verizon Wireless and Leap for Consent to Exchange Lower 700 MHz, AWS-1 and PCS Licenses, Applications of T-Mobile License LLC and Cellco Partnership d/b/a Verizon Wireless for Consent to Assign Licenses*, Memorandum Opinion and Order and Declaratory Ruling, FCC 12-95 (rel. Aug. 23, 2012) (approving the transfers of spectrum between Verizon Wireless and SpectrumCo, Cox, Leap, and T-Mobile); Public Notice, FCC, AT&T Seeks FCC Consent To The Assignment And Transfer of Control of WCS and AWS-1 Licenses, DA 12-1431 (Aug. 31, 2012) (seeking consent to assign or transfer control of a number of WCS and AWS licenses to AT&T).

[66] News Release, FCC, *FCC Announces Tentative Agenda for September Open Meeting* (rel. Sept. 7, 2012).

allocate and license through competitive bidding the following spectrum: 1915-1920 MHz; 1995-2000 MHz; 2155-2180 MHz; 15 megahertz of spectrum between 1675 and 1710 MHz that the Secretary of Commerce shall identify; and 15 MHz of contiguous spectrum to be identified by the Commission.[67] Considering that this is a time of spectrum scarcity and growing demand, holding useable spectrum is unacceptable. While the schedule allows the Commission three years to auction this spectrum, there is no reason to wait any longer. Indeed, MetroPCS consistently has requested that the Commission take action on this spectrum over the past few years,[68] and with the JOBS Act, the Commission must take immediate action to put this spectrum out to the market. In addition, the Commission should also continue to work with NTIA to secure spectrum in the 1755-1780 MHz band. This prime spectrum should be allocated and paired with AWS-3 spectrum for commercial use and auctioned as soon as possible. MetroPCS has been advocating for such auctions as early as 2010, and the Commission has yet to act on *any* suggestions that would allow this spectrum to be put to optimal use despite legislation for it to do so. The Commission cannot fairly conclude that broadband is not being deployed in a reasonable and timely manner when it has been sitting on perfectly suitable and available spectrum for years.

MetroPCS applauds the Commission's decision to finally address the spectrum it acquired during the DTV transition. The Commission has stated its intent to implement an incentive auction of the broadcast television spectrum to expand economic and innovation

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[67] Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6401, 126 Stat. 156 (2012).

[68] *See* MetroPCS Comments in WT Docket No. 11-186 36 (filed Dec. 5, 2011)("*MetroPCS 16th Mobile Wireless Competition Report Comments*"); MetroPCS Communications, Inc., Ex Parte Notice, in ET Docket No. 10-142; WT Docket Nos. 04-356, 07-195 (filed Sept. 26, 2011); MetroPCS Communications, Inc., Ex Parte Notice, in ET Docket No. 10-142; WT Docket Nos. 04-356, 07-195 (filed Oct. 17, 2011).

opportunities. MetroPCS urges the Commission to act on this promptly and make a timely decision with respect to this process in order reallocate such spectrum as soon as possible.

Finally, another spectrum opportunity may be found in the 2 GHz MSS band proceeding aimed at enabling the provision of terrestrial mobile broadband service in up to 40 MHz of spectrum in the 2000-2020 MHz and 2180-2200 MHz spectrum bands.[69] The spectrum at issue is currently allocated on a co-primary basis for mobile satellite and for terrestrial fixed and mobile services, with an incumbent MSS licensee already authorized to provide service in the band. Over the past decade, the 2 GHz MSS spectrum has remained largely fallow despite being useable and available for deployment. MetroPCS has proposed that, given the current spectrum crunch, the Commission should require the existing licensees to relinquish 20 MHz of their 40 megahertz spectrum in exchange for the relaxation of certain regulatory obligations and the grant of a co-primary terrestrial right on the remaining retained 20 MHz. Alternatively, MetroPCS also proposed that the Commission require the existing licensees to relinquish 30 MHz of their 2 GHz MSS spectrum in the top 100 metropolitan statistical areas ("MSAs") while allowing them to retain all 40 MHz outside the top 100 MSAs.[70] Either of these proposals would unleash additional prime spectrum that could be put to use for additional broadband deployment.

Once the Commission secures and allocates the spectrum, it must ensure that distribution via auction allows carriers other than the Twin Bells to acquire the needed spectrum. As MetroPCS previously recommended to the Commission, MetroPCS' Broadband Incentive

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[69] *In the Matter of Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands*, WT Docket No 12-70, ET Docket No. 10-142, WT Docket No. 04-356.

[70] *See generally* Comments of MetroPCS in WT Docket Nos. 12-70, 04-356, ET Docket No. 10-142 (filed May 17, 2012).

Discount Proposal ("BID Proposal") should be implemented.[71] The BID proposal would provide bidding credits to all qualified applicants based on the amount of spectrum they have available in order to promote a broader dissemination of licenses among the "have nots" and improve the prospect of success for new entrants, and small, rural and mid-tier carriers.[72] Even if the Commission chooses not to adopt the BID proposal, MetroPCS urges the Commission to refrain from imposing certain auction rules, such as large license blocks with expansive geographic areas and combination bidding, which favor large, entrenched bidders to the detriment of competitive carriers. If the Commission fails to allow small, mid-tier and rural carriers a fair opportunity to participate in the incentive auction and acquire spectrum, then it will only continue to prolong the deployment of broadband to all Americans. A fair and equitable distribution of spectrum is critical to the ability of small, rural and mid-tier carriers to continue additional broadband deployment.

V. CONCLUSION

The Commission can no longer ignore the important role that mobile broadband plays in Americans' lives. Industry investments in the mobile broadband industry have increased significantly and have allowed for increased mobile deployment throughout the country. Mobile broadband adoption has increased, most notably in low-income households – easing the digital divide.

MetroPCS urges the Commission to include mobile broadband in its determination of whether broadband is being deployed in a timely and reasonable manner. Moreover, MetroPCS

[71] *MetroPCS 16th Mobile Wireless Competition Report Comments*, 38; Comments of MetroPCS Communications, Inc., in WT Docket No. 10-133, 23 – 24 (filed July 30, 2010) ("*MetroPCS 15th Wireless Competition Report Comments")*.

[72] The BID proposal benefits all carriers who have a shortage of spectrum in a geographic area because it is tied to license holdings rather than company revenues or other historical small business tests.

stresses that the Commission must focus on those forces that will drive consumer choice, rather than government-mandated command and control regulations, to ensure that such broadband deployment continues. Lastly, the FCC must act promptly to secure and fairly distribute spectrum for commercial mobile wireless use. Without doing so, the Commission cannot fairly determine whether mobile broadband is being deployed in a fair and reasonable manner.

Respectfully submitted,

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